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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/555,857

09/25/2006

Michel Gillard

104991-161120

4435

24964 7590 10/15/2008  
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EXAMINER

USELDING, JOHN E

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

10/15/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/555,857	<b>Applicant(s)</b> GILLARD ET AL.	
	<b>Examiner</b> JOHN USELDING	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 16, 18-22, 26 and 27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15, 17, 23-25 and 28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/2/2005, 1/25/2007</u> .                                    | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

Claims 16, 18-22, 26, and 27 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected group, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 9/5/2008.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The phrase "greater than or equal to C3" is indefinite because the term C3 is indefinite. For the purposes of applying prior art the office is interpreting this to mean that the residue has 3 or more carbons.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

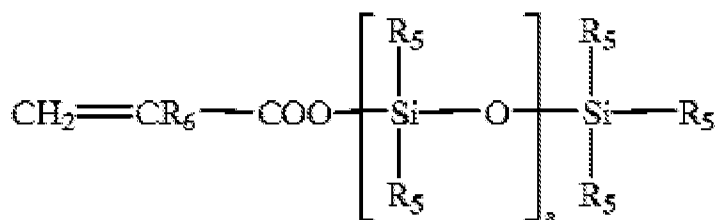
A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4, 5, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsutsumi et al. (6,031,019).

Regarding claim 1: Tsutsumi et al. teach a composition comprising the following organosilyl ester of carboxylic acid (column 5, lines 35-40):



The organosilyl ester and the whole composition of Tsutsumi et al. is an erodability booster by providing excellent waterfastness and scratch resistance (column 1, lines 60-65). An ink composition (column 1, lines 60-62) is considered a paint composition.

Regarding claim 2: Tsutsumi et al. teach using more than one of these silicone monomers (column 4, lines 53-59).

Regarding claims 4-5: the organosilyl ester of Tsutsumi et al. is film forming and a part of a binder system (column 15, lines 63-67).

Regarding claim 14: The organosilyl ester shown above has 3 or 4 carbon atoms in the hydrocarbyl residue.

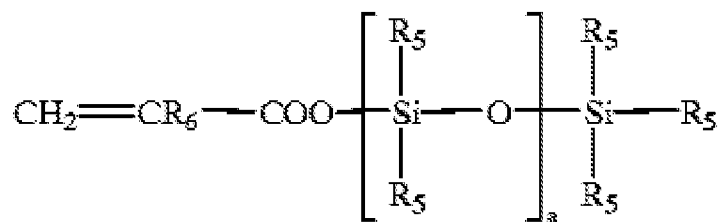
Claims 3 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsutsumi et al. (6,031,019) as applied to claim 1 when taken with Daintith, John A Dictionary of Science (5th Edition). Oxford University Press.

Regarding claim 3: The organosilyl ester has a non-vinyl carbon attached directly attached to the carboxyl group (column 4, lines 60-64).  $R_6$  can be a methyl group making it a methacrylate carbon and not a vinyl carbon. As an evidentiary reference to prove this Daintith is being used to show that a vinyl compound has to have at least 3 hydrogen atoms, i.e.  $\text{CH}_2=\text{CH}-$  (page 854).

Regarding claim 7: The organosilyl ester shown above is monocarboxylic and is a part of the polymer binder (column 3, line 65 to column 4 line 55).

Claim 6 is rejected under 35 U.S.C. 102(b) as being anticipated by Tsutsumi et al. (6,031,019) when taken with Daintith, John A Dictionary of Science (5th Edition). Oxford University Press.

Regarding claim 6: Tsutsumi et al. teach a composition comprising the following organosilyl ester of carboxylic acid (column 5, lines 35-40):



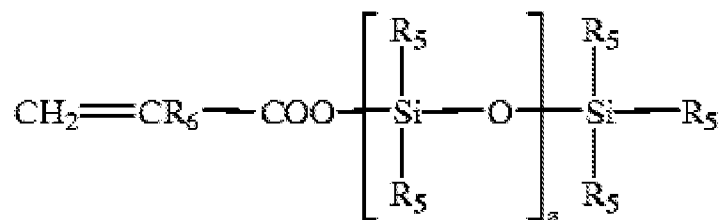
The organosilyl ester has a non-vinyl carbon attached directly attached to the carboxyl group (column 4, lines 60-64).  $R_6$  can be a methyl group making it a methacrylate

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carbon and not a vinylic carbon. As an evidentiary reference to prove this Danith is being used to show that a vinyl compound has to have at least 3 hydrogen atoms, i.e.  $\text{CH}_2=\text{CH}-$  (page 854). The ester is a part of a resinous binder (column 3, line 65 to column 4 line 55) and is film forming (column 15, lines 63-67). An ink composition (column 1, lines 60-62) is considered a paint composition.

Claims 8, 9, 11, 15, 17, and 23-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsutsumi et al. (6,031,019) when taken with Daintith, John A Dictionary of Science (5th Edition). Oxford University Press.

Regarding claim 8: Tsutsumi et al. teach a composition comprising the following organosilyl ester of carboxylic acid (column 5, lines 35-40):



The organosilyl ester is monocarboxylic and has a non-vinylic carbon attached directly attached to the carboxyl group (column 4, lines 60-64).  $\text{R}_6$  can be a methyl group making it a methacrylate carbon and not a vinylic carbon. As an evidentiary reference to prove this Danith is being used to show that a vinyl compound has to have at least 3 hydrogen atoms, i.e.  $\text{CH}_2=\text{CH}-$  (page 854). An ink composition (column 1, lines 60-62) is considered a paint composition.

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Regarding claim 9: The organosilyl ester is a part of a resinous binder (column 3, line 65 to column 4 line 55).

Regarding claim 11: Tsutsumi et al. teach using more than one of these silicone monomers (column 4, lines 53-59).

Regarding claim 15: The organosilyl ester shown above meets applicant's formula (I).

Regarding claim 17: The organosilyl ester shown above has an acyloxy group attached to a silicon atom (column 4, lines 60-64 and column 5, lines 60-64). There are multiple acyloxy groups attached to silicon atoms (column 4, lines 60-64 and column 5, lines 60-64).

Regarding claim 23: The binder of Tsutsumi et al. also comprises other co-monomers (co-binders) (column 4, lines 53-54) that are vinyls such as vinyl pyridine (column 6, line 38) and acrylates such as methyl acrylate (column 7, line 4).

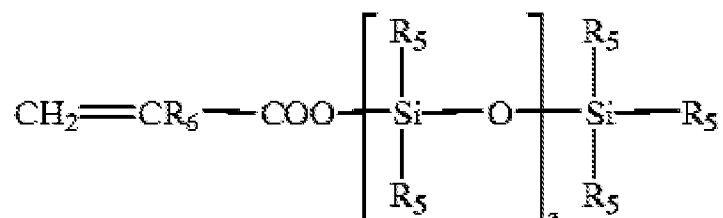
Regarding claim 24: The organosilyl ester shown above is a tri organo silyl compounds and is copolymerized with methyl acrylate (column 7, line 4) to make a tri organo silyl(meth)acrylate copolymer that is used as a part of the binder.

Regarding claim 25: The binder of Tsutsumi et al. incorporates poly(silylesters) (column 4, line 53 to column 5, line 50).

Claim 10 is rejected under 35 U.S.C. 102(b) as being anticipated by Tsutsumi et al. (6,031,019).

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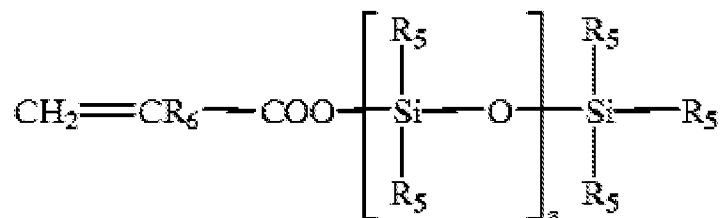
Regarding claim 10: Tsutsumi et al. teach a composition comprising the following organosilyl ester of carboxylic acid (column 5, lines 35-40):



The organosilyl ester is monocarboxylic and is not rosin. It is a part of a binder (column 3, line 65 to column 4 line 55). An ink composition (column 1, lines 60-62) is considered a paint composition.

Claim 12 is rejected under 35 U.S.C. 102(b) as being anticipated by Tsutsumi et al. (6,031,019).

Regarding claim 12: Tsutsumi et al. teach a process of adding the following organosilyl ester of carboxylic acid to an ink composition (column 5, lines 35-40, column 12, line 59 to column 13, line 42):



The organosilyl ester is not rosin. It is a part of a binder (column 3, line 65 to column 4 line 55). An ink composition (column 1, lines 60-62) is considered a paint composition.



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Regarding claim 13: The office takes the position that the composition of Tsutsumi et al. is capable of functioning in the claimed capacity.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsutsumi et al. (6,031,019) as applied to claims 8, 23, and 24 in view of Grueninger (4,108,812), when taken with Healy (6,284,031).

Regarding claim 28: Tsutsumi et al. teach adding various conventional additives to their ink composition (column 12, lines 1-9).

Not disclosed are abietyl dimers.

However, Grueninger teaches that adding Dymrex to aqueous printing inks will increase the binding properties (column 3, lines 46-52). Dymrex is an abietyl dimer as shown by the applicant's specification (0071). Dymrex is also a conventional additive for printing inks as evidenced by Healy (column 5, lines 16-28). Tsutsumi et al. and Grueninger are analogous art because they are both concerned with the same field of endeavor, namely aqueous ink compositions that are used for printing. At the time of the invention a person having ordinary skill in the art would have found it obvious to

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have combined the Dymere of Grueninger with the composition of Tsutsumi et al. and would have been motivated to do so because it would improve the binding.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-15 and 17 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 24, 30, 31, 38, and 39 of copending Application No. 10/520636. Although the conflicting claims are not identical, they are not patentably distinct from each other because the copending application claims an organosilyl ester of carboxylic acid (claim 1), and an antifouling composition comprising the ester (claims 31 and 39).

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This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-15, 17, 23, and 24 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 9, and 11-15 of copending Application No. 11/726130. Although the conflicting claims are not identical, they are not patentably distinct from each other because the copending application claims an organosilyl ester of carboxylic acid (claim 1), and an antifouling paint comprising the ester (claim 14).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN USELDING whose telephone number is (571)270-5463. The examiner can normally be reached on Monday-Thursday 6:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on 571-272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Eashoo, Ph.D./  
Supervisory Patent Examiner, Art Unit 1796

John Uselding  
Examiner  
Art Unit 1796